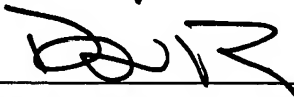


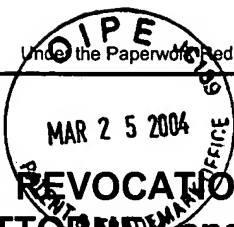


This Form Based on PTO/SB/21

<b>TRANSMITTAL FORM</b> <i>(to be used for all correspondence after initial filing)</i>	<b>Application Number</b>	10/673,537
	<b>Filing Date</b>	9/29/2003
	<b>First Named Inventor</b>	DICAMILLO
	<b>Group Art Unit</b>	2661
	<b>Examiner Name</b>	
<b>Attorney Docket Number</b>		22-0140 / 20T-039

ENCLOSURES (check all that apply)					
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Response <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application  <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition Routing Slip (PTO/SB/69) and Accompanying Petition <input type="checkbox"/> To Convert a Provisional Application <input checked="" type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Small Entity Statement <input type="checkbox"/> Request of Refund	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Additional Enclosure(s) (please identify below): <table border="1" data-bbox="1104 976 1469 1165"><tr><td>Statement under 37 CFR 3.73(b)</td></tr><tr><td> </td></tr><tr><td> </td></tr></table>	Statement under 37 CFR 3.73(b)		
Statement under 37 CFR 3.73(b)					
<table border="1"><tr><td>Remarks</td><td> </td></tr></table>			Remarks		
Remarks					

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	David G. Posz (Reg. No. 37,701) Posz & Bethards, PLC
Signature	
Date	March 25, 2004



# **REVOCATION OF POWER OF ATTORNEY and APPOINTMENT OF NEW POWER OF ATTORNEY**

Application Number	10/673,537
Filing Date	9/29/2003
First Named Inventor	DICAMILLO
Art Unit	2661
Examiner Name	
Attorney Docket Number	22-0140 / 20T-039

I hereby revoke all previous powers of attorney given in the above-identified application:

☒ A Power of Attorney is submitted herewith.

**OR**

☐ I hereby appoint the practitioners at Customer Number:

☐ Please change the correspondence address for the above-identified application to:

☐ The address associated with Customer Number:

**OR**

☐ Firm or Individual Name

Address

Address

City

State

Zip

Country

Telephone

Fax

I am the:

☐ Applicant/Inventor.

☐ Assignee of record of the entire interest. See 37 CFR 3.71.

## **SIGNATURE of Applicant or Assignee of Record**

Name

Connie N. Thousand, Patent Counsel, Northrop Grumman Corporation

Signature

Date

3-9-04

Telephone

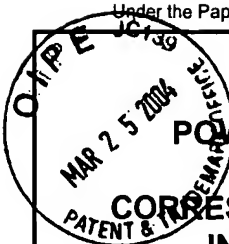
310-813-1550

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

☐ \*Total of \_\_\_\_\_ forms are submitted.

This collection of information is required by 37 CFR 1.36. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

 <p><b>POWER OF ATTORNEY and CORRESPONDENCE ADDRESS INDICATION FORM</b></p>	<b>Application Number</b>	<b>10/673,537</b>
	<b>Filing Date</b>	<b>9/29/2003</b>
	<b>First Named Inventor</b>	<b>DICAMILLO</b>
	<b>Title</b>	<b>VARIABLE BANDWIDTH SIGNAL MULTIPLEXER AND DEMULTIPLEXER</b>
	<b>Art Unit</b>	<b>2661</b>
	<b>Examiner Name</b>	
	<b>Attorney Dkt Number</b>	<b>22-0140 / 20T-039</b>

I hereby appoint:

☒ Practitioners at Customer Number:**23400**

OR

☐ Practitioner(s) named below:

Name	Registration Number

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please recognize or change the correspondence address for the above-identified application to:

☒ The above-mentioned Customer Number:

OR

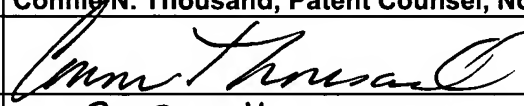
☐ The address associated with Customer Number:

OR

<input type="checkbox"/> Firm or Individual Name				
Address				
Address				
City	State	Zip		
Country				
Telephone	Fax			

I am the:

☐ Applicant/Inventor
☒ Assignee of record of the entire interest. See 37 CFR 3.71.  
 Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).
**SIGNATURE of Applicant or Assignee of Record**

<b>Name</b>	<b>Connie N. Thousand, Patent Counsel, Northrop Grumman Corporation</b>		
<b>Signature</b>			
<b>Date</b>	<b>3-9-04</b>	<b>Telephone</b>	<b>310-813-1550</b>

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

☐ \*Total of \_\_\_\_\_ forms are submitted.

This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

**STATEMENT UNDER 37 CFR 3.73(b)**

22-0140 / 20T-039

Applicant/Patent Owner: **Northrop Grumman Corporation**Application No./Patent No. **10/673,537** Filed/Issue Date: **9/29/2003**Entitled: **VARIABLE BANDWIDTH SIGNAL MULTIPLEXER AND DEMULTIPLEXER****Northrop Grumman Corporation**, a  
(Name of Assignee)**Corporation**,  
(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.

The extent (by, percentage) of its ownership interest is \_\_\_\_\_ %

in the patent application/patent identified above by virtue of either:

- A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

- ☐ Additional documents in the chain of title are listed on a supplemental sheet.

- ☐ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) if authorized to act on behalf of the assignee.

**3-9-04**

Date

**310-813-1550**

Telephone Number

**Connie N. Thousand**

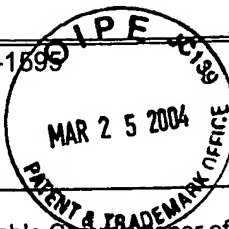
Typed or printed name



Signature

**Patent Counsel, Northrop Grumman Corporation**

Title

**PATENTS ONLY**

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copies thereof.

1. Name of conveying party(ies): N.F. DiCamillo, G.J. Harmon, K.W. Matthews, T.R. Smigla, M.S. Munoz

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

☒ Assignment☐ Merger☐ Security Agreement☐ Change of Name☐ Other: \_\_\_\_\_

Execution Date: 09.25.03, 08.29.03, 07.28.03, 08.06.03, and 07.25.03, respectively

2. Name and address of receiving party(ies):

Northrop Grumman  
1840 Century Park East  
Los Angeles, CA 90067-2199Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

A. Patent Application No.(s)

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Shawn L. Peterson  
McAndrews, Held & Malloy, Ltd.  
500 W. Madison, 34<sup>th</sup> Floor  
Chicago, IL 60661

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41): \$40.00

☒ Enclosed.☐ Authorized to be charged to deposit account.

8. Deposit account number: 13-0017.

(Attach duplicate copy of this page if paying by deposit account).

DO NOT USE THIS SPACE

9. Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*Signature and Registration Number: Shawn L. Peterson

Registration No. 44,286

Date: September 29, 2003Name of Person Signing: Shawn L. PetersonTotal number of pages including cover sheet, attachments and document: 8

**ASSIGNMENT**  
(joint inventors)

We are the joint inventors whose names and residences are listed below:

1. **Nicholas F. DiCamillo**, a resident of the City of Torrance, California, and Country of United States of America.
2. **Garrick J. Harmon**, a resident of the City of Long Beach, California, and Country of United States of America.
3. **Keith W. Matthews**, a resident of the City of Cypress, CA, California, and Country of United States of America.
4. **Terrence R. Smigla**, a resident of the City of Pacific Palisades, California, and Country of United States of America.
5. **Michael S. Munoz**, a resident of the City of Redondo Beach, California, and Country of United States of America.

We have made an invention comprising certain new, useful, and nonobvious improvements in

**VARIABLE BANDWIDTH SIGNAL MULTIPLEXER AND DEMULTIPLEXER**

Said invention is described or intended to be described and set forth in the patent application presently identified as Docket No. 13024US01 (22-0140), which we executed on or about the same date(s) as we signed this assignment for the purpose of seeking Letters Patent of the United States for our invention.

**Northrop Grumman Corporation**, a corporation organized and existing under and by virtue of the laws of the State of Delaware, having a place of business at **1840 Century Park East, Los Angeles, CA 90067-2199**, (hereinafter: "said assignee") desires to acquire the entire right, title, and interest in and to said invention, said application, and any Letters Patent which may be granted for said invention, said application, and any and all divisions, continuations, continuations-in-part, reissues, reexamination certificates, and extensions thereof.

We warrant and represent that we conceived said invention ourselves, that no one other than ourselves are joint inventors of said invention, and that we have not assigned or agreed to assign any rights in said invention or said application to anyone other than said assignee or a predecessor in interest to said assignee.

NOW, THEREFORE, in accordance with obligations entered into pursuant to an Employee Innovation and Proprietary Information Agreement or other agreement and for other good and valuable consideration of which we acknowledge receipt, we hereby assign to said assignee, its successors and assigns, the entire worldwide right, title, and interest in and to said invention, said application, and any Letters Patent which may be granted for said invention, said application, and any and all divisions, continuations, continuations-in-part, reissues, reexamination certificates, substitutes, and extensions of said application (each of which is included herein as a part of "said application"), including but not limited to all our United States and other national rights to said invention and said application and all our rights under the Paris Convention for the Protection of Industrial Property and all other applicable treaties or laws in respect to said invention and said application.

We hereby authorize and request the United States Commissioner of Patents and Trademarks to issue any Letters Patent which may be granted for said invention or upon said application unto said assignee, its successors and assigns, in accordance with this assignment.

We hereby authorize said assignee to apply for patents on said invention in foreign countries, claiming the filing date of said application under the provisions of the Paris Convention for the Protection of Industrial Property and all other applicable treaties and laws, and we further agree to execute any and all documents that may be required or desired by said assignee in order that said assignee may apply for Letters Patent on said invention in foreign countries in our or its name.

We hereby agree to promptly communicate to said assignee or its representatives any facts known to us respecting said invention or said application; to testify in any legal proceeding relating thereto; to sign all lawful papers, including but not limited to all divisional, continuing, continuing-in-part, reissue, substitute, and extension applications, all rightful oaths or declarations, and documents confirming or substituting for this assignment.

---

Signed at Northrop Grumman, in the County of Los Angeles and State of California, this 25<sup>th</sup> day of September, 2003.

Nicholas F. DiCamillo  
Nicholas F. DiCamillo



Signed at Redondo Beach, in the County of Los Angeles and State of California, this 29<sup>th</sup> day of August, 2003.

  
\_\_\_\_\_  
Garrick J. Harmon

Signed at 4:20 PM, in the County of Los Angeles and State of California, this 28th day of July, 2003.

Keith W. Matthews  
Keith W. Matthews

Signed at Pacific Palisades, in the County of Los Angeles and State of CA, this 6<sup>th</sup> day of August, 2003.

Terrence R. Smigla  
Terrence R. Smigla

Signed at NGST, in the County of Los Angeles and State of California this 25 day of July, 2003.

  
Michael S. Munoz